

REMARKS

This AMENDMENT UNDER 37 CFR 1.111 is filed in reply to the outstanding Office Action of July 30, 2003, and is believed to be fully responsive thereto for reasons set forth below in greater detail.

Reconsideration is respectfully requested of the rejection of claims 1-16 under 35 U.S.C. 103(a) as being allegedly unpatentable over Suzuki et al ('030) in view of Tomita ('061).

The previously filed AMENDMENT UNDER 37 CFR 1.111 pointed out that Suzuki et al does not apply pulse signals through the storage capacitor lines 33 to the storage capacitors 8, and that the storage capacitor lines 33 are used only to read signals from the storage capacitors and not to apply pulse signals to the storage capacitors.

In response thereto, the Examiner has now rejected all of claims 1-16 over Suzuki et al in view of Tomita, with the rejection of claims 15 and 16 also adding Takahashi et al. ('300), and the Examiner now takes the position that Tomita applies pulse signals through storage capacitor lines to storage capacitors, and the prior art rejection attempts to combine Suzuki et al and Tomita as explained on pages 4-7 of the Official Action.

The present AMENDMENT distinguishes each of independent claims 1, 2, 13 and 14 further from the applied prior art by reciting that each storage capacitor line has two ends, and that pulse signals are applied to each of the two ends of each storage capacitor line.

These features readily distinguish the claims and the present invention from the applied prior art which does not disclose or teach these features.

Moreover these features are an important distinction for the following reasons.

As noted in the specification on page 10, lines 11-31, with respect to the explanation of the operation of the present invention by Figures 4 and 5,

“The storage capacitors 24 are multi-connected to one Cs line 13 in parallel, which are illustrated by an equivalent circuit with resistors 42 of the Cs lines 13 as shown in Fig. 4. Therefore, since the rising times of the pulses of the pulse signal Vcs from the Cs line 13 vary depending on the positions of the storage capacitors 24, the above-described V_{cs1} varies, thus the quantity of charges stored in each storage capacitor 24 also varies. Fig. 5 shows a relation between the Cs lines 13 and the pulse signals Vcs. In Fig. 5, storage capacitors, TFTs, signal lines, gate lines and the like are omitted. The pulse signals Vcs are applied from the both ends of the Cs line 13. Therefore, if the Cs line 13 is not disconnected like 'A' line, the rising time of the pulse of the pulse signal Vcs applied to the storage capacitor 24 at the center of the CS line 13 is the longest, and the rising times of the pulses of the pulse signals Vcs applied to the storage capacitors 24 at the both ends of the Cs line 13 are the shortest.

However, in the case where the Cs line 13 is disconnected like 'B' line in Fig. 5, the rising time of the pulses of the pulse signal Vcs 54 applied to the storage capacitor 24 in the vicinity of a disconnected portion 52 becomes long. This is because, even if the pulse signals Vcs are applied from the both ends of the Cs line 13, the pulse signal Vcs stops at the disconnected portion 52 and the pulse signal Vcs from the reverse direction is applied. Accordingly, this causes some storage capacitors 24 to store different quantities of charges from the ones stored in the storage capacitors 24 when the Cs line 13 is not disconnected.”

This enables the operation of the present invention and is not disclosed or taught by the applied prior art.

Accordingly, each of independent claims 1, 2, 13 and 14 is believed to readily distinguish over the prior art.

This application is now believed to be in condition for allowance, and a Notice of Allowance is respectfully requested. If the Examiner believes a telephone conference might expedite prosecution of this case, it is respectfully requested that he call applicant's attorney at (516) 742-4343.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "William C. Roch". The signature is fluid and cursive, with the first name "William" being more prominent.

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